What is claimed is:

1. A cardiac rhythm management device, comprising:

one or more sensing channels for sensing depolarizations in a heart chamber and generating sense signals in accordance therewith, each such sensing channel including a sensing amplifier that can be connected to an electrode;

one or more pacing channels for delivering pacing pulses to one or more selected pacing sites;

a controller for controlling the delivery of pacing pulses in accordance with sensing signals and elapsed time intervals;

wherein the controller is programmed to recharge a pacing channel following a pacing pulse by outputting a recharging pulse for a specified recharging interval and to blank the sensing amplifiers during the time a pacing or recharging pulse is output; and,

wherein the controller is further programmed to dynamically adjust the specified recharging interval based upon a measured parameter.

2. The device of claim 1 wherein the controller is programmed to dynamically adjust the specified recharging interval based upon a programmed pacing pulse amplitude setting.

3. The device of claim 1 wherein the controller is programmed to dynamically adjust the specified recharging interval based upon a programmed pacing pulse duration setting.

4. The device of claim 1 wherein the controller is programmed to dynamically adjust the specified recharging interval based upon a programmed AV interval between an atrial and a ventricular pacing pulse.

5. The device of claim 1 wherein the controller is programmed to dynamically adjust the specified recharging interval based upon a programmed offset interval between ventricular paces during biventricular pacing

6. The device of claim 1 wherein the controller is programmed to dynamically adjust the specified recharging interval based upon a measured lead impedance.

7. The device of claim 1 wherein the controller is programmed to dynamically adjust the specified recharging interval based upon a measured voltage droop during a pacing pulse.

8. The device of claim 1 wherein the controller is programmed to dynamically adjust the specified recharging interval $T_{recharge}$ based upon the following formula:

$$T_{recharge} = - RC_l (\ln (2V_{droop}/ V_i/(1 - e^{PW/RC})))$$

where R is a measured lead impedance, C_l is a measured lead capacitance, V_{droop} is a measured voltage droop during a pacing pulse, V_i is a programmed pacing pulse amplitude, PW is a programmed pacing pulse duration, and C is a total measured capacitance.

9. The device of claim 1 wherein the controller is programmed to dynamically adjust the specified recharging interval by using a look-up table that contains optimum recharge intervals corresponding to one or more programmable or measured pacing parameter values.

10. The device of claim 9 wherein the optimum recharge intervals corresponding to various parameter values are determined empirically by device testing.

11. A method for operating a cardiac rhythm management device, comprising:

sensing depolarizations in a heart chamber through one or more sensing channels and generating sense signals in accordance therewith, each such sensing channel including a sensing amplifier that can be connected to an electrode;

delivering pacing pulses through one or more pacing channels in accordance with a programmed pacing mode;

recharging a pacing channel following a pacing pulse by outputting a recharging pulse for a specified recharging interval and blanking the sensing amplifiers during the time a pacing or recharging pulse is output; and,

dynamically adjusting the specified recharging interval based upon a measured parameter.

12. The method of claim 11 further comprising dynamically adjusting the specified recharging interval based upon a programmed pacing pulse amplitude setting.

13. The method of claim 11 further comprising dynamically adjusting the specified recharging interval based upon a programmed pacing pulse duration setting.

14. The method of claim 11 further comprising dynamically adjusting the specified recharging interval based upon a programmed AV interval between an atrial and a ventricular pacing pulse.

15. The method of claim 11 further comprising dynamically adjusting the specified recharging interval based upon a programmed offset interval between ventricular paces during biventricular pacing.

16. The method of claim 11 further comprising dynamically adjusting the specified recharging interval based upon a measured lead impedance.

17. The method of claim 11 further comprising dynamically adjusting the specified recharging interval based upon a measured voltage droop during a pacing pulse.

18. The method of claim 11 further comprising dynamically adjusting the specified recharging interval $T_{recharge}$ based upon the following formula:

$$T_{recharge} = - RC_l \left(\ln \left(2V_{droop}/ V_i/(1 - e^{PW/RC})\right)\right)$$

where R is a measured lead impedance, C_l is a measured lead capacitance, V_{droop} is a measured voltage droop during a pacing pulse, V_i is a programmed pacing pulse amplitude, PW is a programmed pacing pulse duration, and C is a total measured capacitance.

19. The method of claim 11 further comprising dynamically adjusting the specified recharging interval by using a look-up table that contains optimum recharge intervals corresponding to one or more programmable or measured pacing parameter values.

20. The method of claim 19 wherein the optimum recharge intervals corresponding to various parameter values are determined empirically by device testing.